



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0105; Directorate Identifier 2011-NM-123-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 777 airplanes. This proposed AD was prompted by reports of fractured and missing latch pin retention bolts that secure the latch pins on the forward cargo door. This proposed AD would require repetitive detailed inspections for fractured or missing latch pin retention bolts, replacement of existing titanium bolts with new Inconel bolts, and related investigative and corrective actions if necessary. We are proposing this AD to detect and correct fractured and missing latch pin retention bolts, which could result in potential separation of the cargo door from the airplane and catastrophic decompression of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Ana Martinez Hueto, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6592; fax: 425-917-6590; e-mail: ana.m.hueto@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-0105; Directorate Identifier 2011-NM-123-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We have received reports of fractured and missing latch pin retention bolts that secure the latch pins on the forward cargo door. Two adjacent latch pins that migrate from their position, or are broken in close proximity, are not able to hold the door closed for the design loads. Fractured and missing latch pin retention bolts, if not detected and corrected, could result in potential separation of the cargo door from the airplane and catastrophic decompression of the airplane.

Relevant Service Information

We reviewed Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010. This service information describes procedures for repetitive detailed inspections for fractured or missing latch pin retention bolts, and related investigative and corrective actions if necessary.

Related investigative actions include measuring the migration distance of the latch pins; a detailed inspection for any crack or surface depression of the latch pin retention bolt hole; a detailed inspection for any crack or damage of the lower sill of the forward large cargo door, fuselage frames, internal and external skin of the fuselage, cargo door frames, mid-span latch cam (if installed), and main cam latch mechanisms; and a detailed inspection for any cut, crack, or damage of the main cam latch of the cargo door.

Corrective actions include contacting Boeing for repair instructions; repairing; changing the installed bolt head direction; applying the specified torque to the retention bolts to check for loose bolts; replacing existing latch pin retention bolts made of titanium with new Inconel bolts; replacing the latch pin fitting assembly; repairing the lower sill of the forward large cargo door, fuselage frames, internal and external skin of the fuselage, cargo door frames, mid-span latch cam, and main cam latch mechanisms; and replacing the cargo door main cam latch, if necessary.

Replacing latch pin retention bolts made of titanium with new Inconel bolts, if accomplished, would eliminate the need for repetitive inspections for that area only.

For the detailed inspections for fractured or missing latch pin retention bolts, the service information specifies an initial compliance time of within 12 months after the Revision 1 issue date, and a repetitive interval of 1,000 flight cycles.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously.

Differences Between the Proposed AD and the Service Information

Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010, specifies to contact the manufacturer for instructions on how to repair certain conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Costs of Compliance

We estimate that this proposed AD affects 148 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$12,580

We estimate the following costs to do any necessary repairs that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these repairs:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Cross-bolt replacement	2 work-hours X \$85 per hour = \$170	\$50	\$220

We estimate the following costs to do any necessary repairs that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these repairs:

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2012-0105; Directorate Identifier 2011-NM-123-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes; certificated in any category; as identified in Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 52, Doors.

(e) Unsafe Condition

This AD was prompted by reports of fractured and missing latch pin retention bolts that secure the latch pins on the forward cargo door. We are issuing this AD to detect and correct fractured and missing latch pin retention bolts, which could result in potential separation of the cargo door from the airplane and catastrophic decompression of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspect Retention Bolt of Latch Pin Fittings No. 1 through No. 8

At the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010, except as specified in paragraph (i) of this AD: Do a detailed inspection for fractured and/or missing latch pin retention bolts of the latch pin fittings of the lower sill of the forward large cargo door, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010, except as provided by paragraph (h) of this AD. Do all applicable related investigative and corrective actions at the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010. Repeat the inspection thereafter at the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010, except as specified in paragraph (j) of this AD.

(h) Repair

If any cut, crack, or damage is found during any inspection required by this AD, and Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010, specifies to contact Boeing for appropriate action: Before further flight, repair the cut, crack, or damage in accordance with a method approved by the Manager, Seattle, Aircraft Certification Office (ACO), FAA. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(i) Exception to Compliance Time

Where Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010, specifies a compliance time after the date on that service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD.

(j) Optional Terminating Action for Repetitive Inspections

Replacing latch pin retention bolts made of titanium with new Inconel bolts, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-52A0038, Revision 1, dated June 24, 2010, terminates the repetitive inspections required by paragraph (g) of this AD at Stations 509.10, 522.75, 537.50, 554.30, 562.90, 579.70, 591.25, and 604.90, latch pin fittings No. 1 through No. 8.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention

of the person identified in the Related Information section of this AD. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(I) Related Information

(1) For more information about this AD, contact Ana Martinez Hueto, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6592; fax: 425-917-6590; e-mail: ana.m.hueto@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on January 27, 2012.

Kalene C. Yanamura
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2012-2911 Filed 02/07/2012 at 8:45 am; Publication Date: 02/08/2012]